

## Picture Tube

PAN-O-PLY TYPE  
90° MAGNETIC DEFLECTION      LOW-GRID-No.2 VOLTAGE  
ELECTRICAL

**Direct Interelectrode Capacitances**

Cathode to all other electrodes . . . . .	5	pF
Grid No.1 to all other electrodes . . . . .	6	pF
External conductive coating to anode . . . . .	300 min—750 max	pF
<b>Heater Current at 12V.</b> . . . . .	$75 \pm 7$	mA
<b>Heater Warm-Up Time (Average).</b> . . . . .	11	s
<b>Electron Gun</b> . . . . .	Type Requiring No Ion-Trap Magnet	

**OPTICAL**

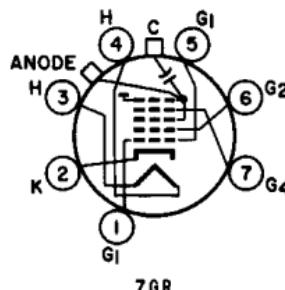
<b>Phosphor</b> . . . . .	P4—Sulfide Type, Aluminized
For curves, see front of this section	
<b>Faceplate</b> . . . . .	Filterglass
Light transmission at center (Approx.)	49.5%

**MECHANICAL**

<b>Weight (Approx.)</b> . . . . .	3.1 lb
<b>Overall Length</b> . . . . .	8.28 max in
<b>Neck Length</b> . . . . .	3.55 max in
<b>Projected Area of Screen</b> . . . . .	38 sq in
<b>External Conductive Coating<sup>a</sup></b>	
Type (See CRT OUTLINES 1 at front of this section) . . . . .	Regular-Band
Contact area for grounding . . . . .	Near Reference Line
<b>Cap.</b> . . . . .	Recessed Small Cavity (JEDEC No.JI-21)
<b>Base</b> . . . . .	Small-Button Special Miniature 7-Pin (JEDEC No.E7-91)

**TERMINAL DIAGRAM (Bottom View)**

- Pin 1—Grid No.1
- Pin 2—Cathode
- Pin 3—Heater
- Pin 4—Heater
- Pin 5—Grid No.1
- Pin 6—Grid No.2
- Pin 7—Grid No.4
- Cap—Grid No.3, Grid  
No.5, Screen, Collector
- C—External Conductive  
Coating

**MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES**

Voltages are positive with respect to cathode

<b>Anode Voltage</b> . . . . .	8000 min—12000 max	V
<b>Grid-No.4 Voltage</b>		
Positive value . . . . .	1100 max	V
Negative value . . . . .	550 max	V
<b>Grid-No.2 Voltage</b> . . . . .	75 min—250 max	V



**Grid-No.1 Voltage**

Negative peak value. . . . .	220 max	V
Negative bias value. . . . .	155 max	V
Positive bias value. . . . .	0 max	V
Positive peak value. . . . .	2 max	V

**Heater Voltage** . . . . . 10.8 min—13.2 max V

**Peak Heater-Cathode Voltage**

Heater negative with respect to cathode:		
During equipment warm-up period $\leq$ 15 s	450 max	V
After equipment warm-up period . . .	200 max	V
Heater positive with respect to cathode:		
Combined AC & DC voltage . . . . .	200 max	V
DC component . . . . .	100 max	V

**TYPICAL OPERATING CONDITIONS FOR CATHODE-DRIVE SERVICE**

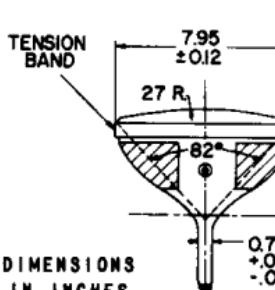
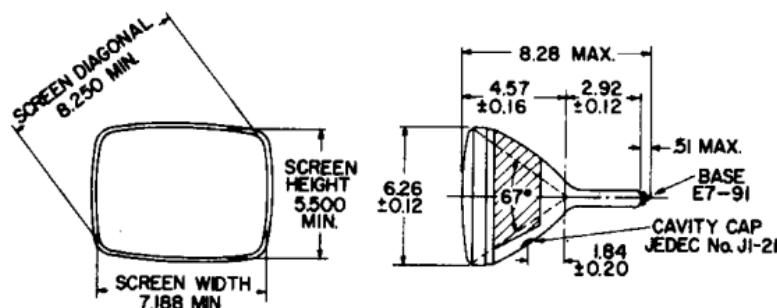
*Voltages are positive with respect to grid No.1*

Anode Voltage. . . . .	9000	V
Grid-No.4 Voltage. . . . .	0 to 300	V
Grid-No.2 Voltage. . . . .	100	V
Cathode Voltage. . . . .	32 to 50	V
For visual extinction of focused raster		
Field Strength . . . . .	0 to 8	G
Of required adjustable centering magnet		

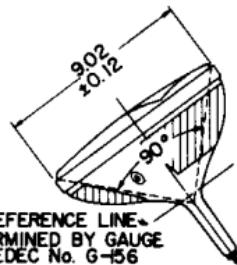
**MAXIMUM CIRCUIT VALUE**

**Grid-No.1 Circuit Resistance** . . . . . 1.5 max M $\Omega$

\* Includes implosion protection hardware.

**DIMENSIONAL OUTLINE (BULB J71-1/2 BI)**

REFERENCE LINE  
DETERMINED BY GAUGE  
JEDEC No. G-156



92CL-14672